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ABSTRACT

Described are three manpower development programs for handicapped children selected as examplary because of program elements worthy of further study or replication. Presented in the form of case studies, each program is examined in terms of an introduction, program operations, notable features, people in the program, program evaluation, recommendations, and informational sources. Described are the following programs: Clinical Teacher Model Project (Tallahassee, Florida) preparing teachers to diagnose and remediate mildly handicapped children through performance based, individualized training; Diversified Occupations Professionals Development Program (Burlington, Vermont) offering training in career education for teachers of the handicapped throughout the state; Mark Twain Teacher Internship Program (Rockville, Maryland) using seminars and practica in another performance based program helping experienced teachers deal with children with special needs. (See EC 052 242, EC 052 243, and EC 052 244 for further information). (DB)

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EXEMPLARY PROGRAMS FOR THE HANDICAPPED

A PROJECT TO ASSESS AND DOCUMENT EXEMPLARY PROGRAMS FOR THE EDUCATION OF THE HANDICAPPED

BY ABT ASSOCIATES INC.
FOR THE NATIONAL INSTITUTE OF EDUCATION AND THE U.S. OFFICE OF EDUCATION, BUREAU OF EDUCATION FOR THE HANDICAPPED

EC052 245

ED 079891

This report was prepared for:

The U.S. Department of Health, Education and Welfare, National Institute of Education, Task Force on Dissemination and the U.S. Office of Education, Bureau of Education for the Handicapped

by:

Abt Associates Inc.
Human Development Area
55 Wheeler Street
Cambridge, Massachusetts 02138

under

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June 1973

Volume IV

MANPOWER DEVELOPMENT

Case Studies

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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FOREWORD

This report was prepared by Abt Associates Inc. for the U.S. Department of Health, Education and Welfare, National Institute of Education, Task Force on Dissemination and the Office of Education, Bureau of Education for the Handicapped under Contract OEC-0-72-5182 to "Assess, Document, and Spread Exemplary Programs for the Education of the Handicapped."

From a sample of 50 programs provided by the Bureau of Education for the Handicapped, Abt Associates selected 17 "exemplary" programs in the areas of early childhood education, career education, and manpower development as subjects for in-depth program descriptions for national dissemination. Selection was based on a telephone survey of the initial sample and an assessment of each candidate program according to general and specific criteria developed by NIE/BEH and revised by Abt Associates.

In using the term "exemplary" with regard to the programs selected, Abt Associates refers to the interesting and promising features of a program which appeared to be worthy of further study. Programs were selected on the basis of notable elements rather than on the basis of total or proven (validated) exemplariness. The word "exemplary", therefore, refers to elements in the programs which serve as examples in the field.

The seventeen program descriptions are presented in three separate volumes for easy reference: Volume II. Career Education; Volume III. Early Childhood Education; Volume IV. Manpower Development. Volume I is a Final Report documenting the activities involved in the conduct of this study.

TABLE OF CONTENTS

Manpower Development Programs

(Each case study has its own Table of Contents located by the title sheet following each divider.)

Clinical Teacher Model Project
Tallahassee, Florida

Diversified Occupations Professionals Development Program
Burlington, Vermont

Mark Twain Teacher Internship Program
Rockville, Maryland

THE CLINICAL TEACHER MODEL PROJECT

TALLAHASSEE, FLORIDA

A performance-based, individualized model training program to prepare Clinical Teachers capable of providing diagnosis and remediation of mildly handicapped children.

January 1973

Principal Authors:

Lorrie Stuart
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TABLE OF CONTENTS

PART		PAGE
ONE:	INTRODUCTION	1
	Overview	1
	Context of the Program	2
TWO:	PROGRAM OPERATIONS	3
	Instructional Program	3
	Curriculum Content	5
	Clinical Teacher Training	6
THREE:	NOTABLE FEATURES	7
	Individualized Instructional Modules	7
	Computerization	8
FOUR:	PEOPLE IN THE PROGRAM	10
	Students/Trainees	10
	Staff	11
	Community	12
FIVE:	PROGRAM EVALUATION	13
SIX:	RECOMMENDATIONS FOR FURTHER INFORMATION	16
	Recommendations for Replication	16
	For Further Information	17
	Materials Available	18

PART ONE:

INTRODUCTION

OVERVIEW

The Clinical Teacher Model Project (officially called Preparation of the Clinical Teacher for Interrelated Areas of Special Education) was developed in the College of Education, Department of Habilitative Sciences at Florida State University in Tallahassee, Florida, and is currently being field-tested there. The individualized instructional system trains teachers to deal with mildly handicapped children, including the educable mentally retarded, learning disabled, and emotionally disturbed. Students who graduate from the program receive their bachelor's and master's degrees simultaneously, as well as a teaching certificate in special education from the State of Florida. The Project will graduate its first master's interns at the end of the 1973 academic year, and currently has 15 juniors, 10 seniors and 10 master's degree candidates.

Underlying the Project's instructional system is the philosophy that certain academic and social behaviors or skills can be identified which will enable the mildly handicapped child to succeed in a regular classroom, regardless of his particular disability. In turn, certain basic competencies are required for the teacher to allow him or her to deal equally successfully with children with a range of handicapping conditions. The Project has identified necessary pupil skills in language, pre-reading, reading, pre-math, mathematics and social areas. Required competencies for the Clinical Teacher include observation, diagnosis, intervention, and evaluation. Junior trainees proceed through a sequenced modular curriculum and observe special classes at local pre-schools and elementary schools, while seniors work on diagnosis and intervention skills in public schools. Master's-level interns concentrate on intervention and evaluation in classrooms in three counties adjoining Leon County, where the University is located.

Individual modules are the basic framework for the instructional program. Each module provides the trainee with objectives, instructional activities, and criteria for demonstrating competencies. Students confer with the staff Clinical Professor to select the performance criteria and resources to be used for each module according to their own needs, and progress at their own rate of speed.

This system frees program staff from traditional information-giving activities, and allows them to work individually and creatively with a large number of students. Data on student progress through individual modules and through the entire program are stored and reported by a computer which makes weekly print-outs for staff and student personnel.

CONTEXT OF THE PROGRAM

In 1963, the Project Director, then working at Trenton State University in New Jersey, began working on the idea of a program which would prepare clinical educators capable of providing diagnosis and remediation of the variety of learning difficulties presented by exceptional children. Shortly after he joined the staff of Florida State University in 1968, the Director submitted a proposal for a planning grant for a model program to the Bureau of Education for the Handicapped which was funded for 1969-70. An interdisciplinary team of experts in the fields of teacher education, curriculum design, evaluation, behavioral psychology, media, computer programming, and research design and analysis produced the first edition of the model, and further BEH grants permitted refinement of this model (1970-71). The 1971-72 school year marked the first field-testing for the training program and evaluation design. The Project is now field-testing revised instructional modules on junior trainees, and evaluating master's-level internship competencies and overall student and curriculum performance. By the end of 1974-75, staff will have accumulated sufficient summative data to determine the effectiveness and efficiency of this training model. If found to be cost-effective, the program will be taken over by the University.

The Project Director is also Coordinator of the Program of Interrelated Areas within the University's Department of Habilitative Sciences, one of five training programs for teachers of children with different handicaps. The Clinical Teachers Project is also part of the Educational Research Institute which was set up to bring together multi-disciplinary teams involved in educational research and development. ERI is located off-campus, and its projects are funded by private, state and federal sources. The Clinical Teacher Project is funded for approximately $169,000 for 1973-74, of which the federal (BEH) share is some 88%, with Florida State University contributing 12%.

PART TWO:

PROGRAM OPERATIONS

INSTRUCTIONAL PROGRAM

Since the purpose of special education for mildly handicapped children (educable mentally retarded, learning disabled and/or emotionally disturbed) is to produce academic and social behaviors which will allow such children to succeed in a regular classroom, the Clinical Teacher Project's focus is on common behaviors desired for all children rather than on the differences or disabilities of the exceptional child. Just as common behaviors have been identified for pupils, common skills have been identified which clinical teachers need to produce these desired behaviors, regardless of the child's disability. The program at Florida State University is designed to produce four major competencies essential to the successful Clinical Teacher: observation, diagnosis, intervention and evaluation. Graduates should be able to identify individual pupil entry levels, learner characteristics and desired outcomes; provide individualized instruction based on a match of task, learner and resources; and monitor pupil and curriculum performance to provide feedback for improvement of the instructional program.

As illustrated on the chart below, the potential Clinical Teacher trainee is offered an exploratory program of orientation. Knowledge of the Clinical Teacher concept through the instructional module curriculum (Level III) is prerequisite to the performance competencies of observation, diagnosis, intervention and evaluation (Level II). Level I objectives represent the criteria for a successful graduate of the program.

LEVELS OF OBJECTIVES FOR PERFORMANCE-BASED TEACHER EDUCATION PROGRAMS

	OUTCOMES	CRITERIA	CONTEXT
IV.	EXPLORATORY		
	Early awareness and orientation.	Not measured.	Activity or event, i.e., visit resource room in a local school and assist teacher and pupils for a minimum of 10 hours.

	OUTCOMES	CRITERIA	CONTEXT
III.	KNOWLEDGE		
	Understanding of behaviors, concepts, principles, and attitudes.	Assessment of knowledge, understanding and attitudes of trainees.	Curriculum content.
II.	PERFORMANCE		
	Teacher competencies and skills.	Assessment of overt teaching skills and trainee behaviors to determine mastery of specified competencies.	Practicum (quarterly) in actual classroom. Laboratory or simplified training conditions (days or weeks) of restricted or micr teaching simulations.
I.	PRODUCT		
	Pupil achievement and gains as a result of teacher action on the performance of pupils.	Time sampling of teacher behaviors and pupil achievement.	Internship (one quarter). Employment (full-time in actual classroom (1-2 years).

Instructional modules, the organizing elements of this performace-based teacher-education curriculum, are discussed in Part Three, Notable Features. The instructional program itself is highly individualized. After entering the program, the trainee takes major mastery tests to enable the Clinical Professor to help him plan a curriculum matched to his abilities and learning characteristics. If the student can demonstrate mastery of either an entire competency or of an individual module during the pre-tests, he may proceed to the next major competency, or skip the individual module. Several modules may be entered simultaneously and completed at the student's own rate. Although some skills are prerequisites for entering modules relating to a specific competency (for example, the student must be able to demonstrate competency in diagnosis before he goes on to intervention), the modules within specific competency areas or sequences are not cumulative, and a student is free to start with any module in a given sequence. Since the program is performance-based rather than time-based, there is no standard time set for the individual's progress through the entire program. Staff feel that it could be possible for a student to complete the curriculum in two years.

The program has now identified desired behaviors in language, pre-reading, reading, and mathematics to be produced in exceptional children by the Clinical Teacher. An entire array of modules containing purpose, behavioral objectives, instructional resources and sample test items have been designed for the pre-reading and reading sequences, and modules in the remaining sequences will be complete in summer of 1973. The conceptual modules for all competency areas, specifying major performance tests, performance objectives, major knowledge tests and knowledge objectives, have also been completed.

CURRICULUM CONTENT

The latest revised curriculum lists 24 different modules broken down into five major sequences: Knowledge, Diagnosis, Intervention, Evaluation, and Clinical Teaching. Sub-sequences are:

I. Clinical Teacher Model (Knowledge)	3 modules
II. Diagnosis	
• Desired Behavioral Sequences	1 module
• Assessing Pupil Behaviors	2 modules
• Administration, Scoring and Interpretation of Formal Tests	7 modules
• Constructing, Administering, Scoring and Interpreting Informal Tests	1 module
• Prescribing Pupil Objectives and Instructional Strategies	2 modules
III. Intervention	
• Planning Individualized Instruction	3 modules
• Conducting Individualized Instruction	1 module
IV. Evaluation	
• Improving Pupil Instruction	2 modules
• Improving Teacher Competencies	1 module
V. Clinical Teaching	1 module

CLINICAL TEACHER TRAINING

Juniors spend one morning a week in seminars and three mornings a week observing exceptional and "normal" children aged 3 to 12 years. Field placements for juniors are in two local Early Childhood Education Centers and two open-space elementary schools which have resource rooms for mildly handicapped youngsters. Students spend 30% of their time in resource rooms and the remainder in regular classes. Using the sequences of desired behaviors as a framework, junior trainees pinpoint and record specific pupil behavior.

Seniors also spend one morning a week in seminars, but have four rather than three mornings in the field demonstrating competencies in observation, diagnosis, intervention and evaluation in two Leon County public schools. After completion of the diagnostic competency, the senior contracts with the Clinical Professor to produce "mini-gains" (small behavioral improvements) in four handicapped children. One of these contracts must be for producing mini-gains in pre-reading, one in reading, and the third and fourth in social, math or language areas. The trainee diagnoses the child before beginning work with him or her, and when ready, asks the Clinical Professor or the Program Director to come in and observe his interaction with the child. The Clinical Professor then assesses the trainee's performance in completing his mini-gains contract.

During their master's year, trainees identify the individual skills they need to refine for completion of their training. Most often these are in the areas of intervention and evaluation. The master's internship is designed so trainees can perform almost independently all the competencies of the Clinical Teacher, produce significant gains in exceptional children, and evaluate the effectiveness of their instructional strategies. Three counties adjoining Leon County (with selected resource rooms for mildly handicapped children with varying disabilities) are used for this final practicum.

Field practica are weighted a good deal more in this curriculum than formal seminars. Staff in local schools cooperate by providing guidance and instruction to trainees in resource rooms and regular classes. The remainder of the training consists of work on individualized instructional modules.

PART THREE:

NOTABLE FEATURES

INDIVIDUALIZED INSTRUCTIONAL MODULES

One of the basic philosophies underlying the Clinical Teacher Model is that "teachers teach the way they are taught." The program implements this philosophy by using individualized instructional modules to produce "desired behaviors" --competencies-- in its trainees, with the belief that trainees will automatically transfer this strategy to their work with handicapped students, who also need individualized instruction to achieve desired academic and social behaviors. The program attempts not merely to teach about individualized instruction, but rather to teach by means of individualized instruction.

Together, the trainee and the Clinical Professor define the task to be performed for each instructional module, and then try to match the characteristics of this task with the learning characteristics of the trainee and the resources available to him. This process requires identification of the various components of the task, a diagnosis of the learning characteristics of the trainee, and a survey of outside resources which can help him accomplish the task. The same general procedures involved in the analysis of a modular task can be applied to the production of a specific behavioral gain in a handicapped child.

The modules developed by the program are designed to promote this sort of task analysis. Each module--whether it relates to diagnosis, intervention, or any other sequence--is broken down into the same components:

Purpose--what the trainee is expected to accomplish or gain by the completion of the module.

Behavioral Objective--knowledge, performance, outcome.

- Outcome
- Assessment Context
- Assessment Criteria

Instructional Resources/Options/Activities--including readings, seminars, video-tapes, courses in the college, multi-media resources, small-group committees to plan, negotiate, and produce the product.

Sample Test Items--products, papers, essays, tests, demonstrated performance.

The format also includes an indication of how long the modular task is expected to take on the average, but students may spend as much or as little time on the task as they deem necessary. Once the student and the Clinical Professor have negotiated a contract including the type of resources to be used and the method of assessment, the student is on his own. He makes weekly progress reports to the program's computer system and may ask for guidance from any of the program staff, but the learning process is essentially an independent effort.

This independent learning system frees program staff for individual and creative work with a large number of students, all working in different modules with vastly different instructional needs. This is one of the major selling points of the program to other universities, in that it makes the individual staff member a great deal more cost-effective. At Florida State, for example, only 2½ instructors are dealing successfully with 40 students working in many different areas, at many different levels. Since the modules are essentially "portable," they could even be used to help teachers in the field upgrade their skills in-service. Arrangements might be worked out whereby teachers could get credit for individual modules from the State Department of Education toward renewal of their teaching certificates without having to do the entire curriculum. (In Florida, there are no permanent teaching certificates: all teachers must renew their certificates every five years.)

COMPUTERIZATION

The program uses a computer to store information and chart the progress of individual students. An adaptation of the Multiple Access and Retrieval System (MARS 2) on a CDC 6500 computer, the system provides easy access for both faculty and students via an off-line cathode-ray tube with off-line printers located on-campus and in the program's administrative offices at the Educational Research Institute. Student or faculty members can have hard copy after scanning the student's record on the tube and selecting the information desired.

Data is entered weekly for each student via a Module Transaction Log made up of three forms which report either module entry, transaction, or completion. The student completes the top half of the appropriate form for each module he worked

on during the week. The bottom half of the form is used by the Clinical Professor for entering the products completed, proficiency scores, student learning styles, and instructional strategy used. Relevant information is printed out in three reports:

> Task Characteristics--module number, competency, objectives, level of performance, resources available, standard proficiency, and standard time for the module.
>
> Learner Characteristics--information on learner styles and individualized instructional strategies.
>
> Performance--entry date, resources used, products, proficiency level, completion date, and actual time taken.

The system can sort for individual modules or can summarize all modules worked on by a student to produce a progress capsule.

In addition to student progress, the computer may soon be used to manage the sequences of desired behaviors for exceptional children (language, pre-reading, reading, and mathematics). Master's-level interns will be able to document the produced skills and search for interactions between aptitudes of learners and treatments. In addition, the computer could be used to make recommendations on resources for individual students, based on their personal learning styles. Staff also plan to use the system to conduct an analysis of the dollar costs required to produce a specific competency in a trainee, or to produce a particular gain in a handicapped child.

Staff point out that the Clinical Teacher Model can be operated without a computer, but fewer trainees could be handled by a small staff.

PART FOUR:

PEOPLE IN THE PROGRAM

STUDENTS/TRAINEES

Trainees presently include 15 juniors, 10 seniors, and 10 master's degree candidates, ranging from 20 to 26 years of age. The majority are middle-income whites, which makes them fairly representative of the Florida State University student population. Although the first group of students to enroll (the present master's degree candidates) were predominantly men, the last two classes have contained more women: this is also representative of the population of the College of Education. Another change in trainee profile is related to academic background: whereas students in the first class came from fairly diverse academic backgrounds (arts and sciences), later enrollees have come primarily from the College of Education. Since over half of the students at the University are transfers from junior colleges, the program reserves five spaces a year for transfers.

For its model research and evaluation purposes, the program has needed only 15 students a year. However, once the College of Education takes over the program, it is expected that approximately 100 students will be enrolled annually.

Recruitment and Selection

The Project does not actively recruit trainees: it limits itself to responding to those students who take the initiative to apply (usually sometime during the spring of their sophomore year). Most students hear about the program from other students, either in the College of Education of at junior colleges throughout Florida.

Selection is based on three primary criteria: Does the student want to teach? Is he especially interested in teaching handicapped children? and Does he seem well-suited to the type of independent learning atmosphere in which the program operates? No other set criteria, such as grade point averages, are used. Staff base their selection of trainees on what they judge the individual's committment to be as demonstrated by prior experience with children (especially handicapped

children) and the applicant's responses during personal interviews. Using these methods, the program has been able to select 15 students from the 30 to 40 who have applied each year.

STAFF

Core Project staff consists of three full-time people: the Project Director (also Coordinator of Interrelated Areas), the Clinical Professor, and the Project Evaluator. The Director, who has been with the program since its inception, spends about 75% of his time in management, 20% in instruction, and 5% in evaluative activities. He is a full professor at the University. The Clinical Professor spends 75% of his time in instruction (half of this in campus-based seminars and half in field-based practica) and the remaining 25% in evaluation and program design. The Evaluator devotes 75% of his time to evaluation, 10% to instruction, and 15% to program design. Both the Clinical Professor and the Evaluator are assistant professors at the University. Support staff include a half-time computer analyst, a half-time electronics technician, a full-time secretary, and a full-time accountant/clerk.

Students themselves are a vital part of the instructional team. After demonstrating various competencies, master's students provide on-site help to seniors, and seniors in turn work with the junior trainees. Staff feel this arrangement not only expands the instructional resources of the program, but is often more relevant and immediate than it would be if only faculty were available.

Although the Clinical Teacher Model requires fewer instructional staff for a relatively large number of trainees, staff are not yet certain what the optimal staff/student ratio for such a program would be. Many variables are involved, including the number of field sites and student hours spent at these sites, since field settings are the primary locus for instruction, and formal seminars represent only a small part of the total curriculum. At present, students spend only the morning hours in their field placements. The number of participants could therefore be doubled if afternoon field placements were used, but this might necessitate an increase in instructional staff.

COMMUNITY

The program originally had a 15-member community advisory board to help formulate program plans and provide advice on such matters as what kind of marketplace there would be for program graduates. This board included the Leon County Coordinator for Exceptional Child Education, the Director of the County Mental Health Association, the Director of the Easter Seal Society, the State Director of Exceptional Child Education, the State Directors of Youth Services and Mental Retardation, local school representatives, and various other influential citizens. The board met monthly with faculty during the planning stages, but reduced its involvement after implementation began.

The program's primary link with the community now is its interaction with local Early Childhood Education Centers and the public schools in which trainees have field placements. However, during the last year of the program grant (1974-75) the Director hopes to re-involve the advisory board to show its members what the program has achieved and to obtain their comments and suggestions.

PART FIVE:

PROGRAM EVALUATION

The weight the Project attaches to evaluation is evident in its staffing pattern: one of the three full-time core staff is an evaluator. The primary focus of evaluation so far has been on formative data which provides for continual monitoring and revision of curriculum and program operations. The design for the summative or final evaluation of the program (including documentation of specific skills and competencies acquired by students and their success in producing desired behavioral changes in handicapped children in the field) is not yet complete. The 1972-73 juniors are the first group of students who will progress through the program in its refined form, and their data will form the basis for the summative evaluation. The first group of students accepted into the program, who are just now beginning their master's-level internship, did not use the present curriculum: they helped develop it.

Formative analysis efforts are now well underway. During 1971-72, activities focused on specific procedures for implementing the formative analysis model and on collection and use of data for program revision. Data collected was used as a framework for curriculum revision, culminating in the production of the prototype edition of the current curriculum. Future instructional field trials, evaluation activities, and performance data from both Clinical Teacher trainees and excpetional children will allow a final major revision of the curriculum during the summer of 1974.

The formative analysis model was designed to be flexible enough to meet diverse data requirements, such as:

- Provide reasonable assurance of learner success during instructional field trials.
- Provide revision recommendations of a highly specific nature.
- Differentiate between learner problems and instructional problems.
- Provide diagnostic information about learner difficulties.
- Give an accurate measure of learner achievement.
- Be appropriate for both Clinical Teacher competency modules and exceptional child behavior modules.

Extensive revision of instructional components of the training model was undertaken during the summer of 1972. Changes were based on data procured during and following the initial trial of the Clinical Teacher Model (knowledge), observation, diagnosis, and intervention modules. Techniques employed in data collection included logical analysis, opinion survey, informal interviews, direct observation, and student participation in revision.

The opinion survey was developed to assess trainee impressions of the overall program; the items represented the following major categories of program attributes: (1) general program characteristics; (2) instructional objectives; (3) instructional resources and activities; (4) performance assessment; and (5) other characteristics. The instrument was administered to first-year trainees following their completion of the Clinical Teacher Model (knowledge) and observation compenents. The survey led to the following recommendations for revision:

1. Revise recruitment procedures to include activities which ensure thorough familiarization with Project goals for all serious candidates.
2. Review arrangements for trainees to contact and consult with Project staff members.
3. Revise objectives to include an exact statement of the expected performance and the criteria for mastery of the objective.
4. Review Clinical Teacher competencies to identify needed additions, shifts in emphasis, and possible deletions.
5. Initiate a concerted effort to provide additional resource options along with improved access to currently available resources.
6. Edit existing resources and provide guides, such as adjunct programming, to focus attention upon key segments.
7. Provide greater congruence between stated objectives and recommended resources and activities.
8. Review the purposes of the seminars and ensure that they do not exist primarily for routine "housekeeping" duties that could be better handled by other means.
9. Develop new means for performance assessment which clearly measure the desired competencies and not some unspecified behavior.

As a follow-up to the logical analysis and opinion survey, a series of informal interviews were held with samples of the trainees. Data from these interviews suggested a lack of clarity in program objectives and/or incongruence between objectives and performance measures. In an effort to pinpoint the difficulties, direct observation techniques were employed, and attendance at student seminars provided further evidence that a number of intended objectives had not yet been explicitly stated to a sufficient degree in the modules. Modules were revised accordingly.

The first group of students in the program constituted an integral part of the total development effort. The philosophy which included these students in program development also suggested their involvement in the revision process. Trainee participation in the revision effort provided a reliable source of feedback information, and many of the problems associated with data interpretation and diagnosis of necessary program modifications were avoided. Staff believe that this vehicle for focusing attention upon critical revision needs should be employed whenever possible.

The Project's Summary of Evaluation Findings for Fall-Winter/1972-73 showed that juniors had been successful in every module attempted, with an average mastery level on the Clinical Teacher Model (knowledge) component of 87%. Senior trainees had successfully completed every module they attempted, and their average mastery level on the diagnosis competency was above 90%. A Problems and Benefits Analysis administered to first- and second-year trainees indicated the need for further revision of the presentation of goals and objectives, instructional content and instructional resources. The Benefits Analysis results were summarized as follows:

> Responses of the Clinical Teacher Trainees on the benefit analysis survey were overwhelmingly positive. Even allowing for redundancy in the items and possible bias of students in favor of a program in which they chose and continue to participate, the response pattern clearly indicates that the students perceive many major benefits derived from the program... In general, the trainees seemed convinced that an individualized program focusing attention on the learning objectives of the individual child has greater potential for meeting the needs of exceptional children than less personal approaches and those that emphasize categorical labeling. The feeling that various diagnostic and intervention competencies are crucial for assisting pupils to overcome academic and social inadequacies was expressed in numerous ways.

PART SIX

RECOMMENDATIONS FOR FURTHER INFORMATION

RECOMMENDATIONS FOR REPLICATION

The Project Director divided his recommendations for other programs wishing to institute a Clinical Teacher Model into two types: those for "innovators," who wish to create their own model, and those for "adopters," who wish to modify and use the model already developed at Florida State University.

Recommendations for "innovators" include the following:

- An interdisciplinary team for model development

  In order to develop a model similar to that used at Florida State, a planning team is required whose members can fulfill three major roles: (1) designer (curriculum reform); (2) experimental "try-out" teacher; and (3) instructional systems/technology evaluator. These people must have not only content experience, but also managerial and process skills, and, equally important, must be able to work well together as an interdisciplinary team.

- High-risk capital

  A program such as this involves fairly innovative--if not radical--research, and this requires a good deal of high-risk capital for research and development activities over an extended period of time. The Project Director suggests that funding for a period of less than five years is infeasible for development of a new Clinical Teacher Model.

- A student "try-out" population

  Student-trainees should be involved from the beginning of the program, and this involvement should continue through all phases to summative evaluation to assure the program continual feedback in design and implementation from a relatively stable testing population.

- Reality testing of the marketplace

  Involvement of local agency staff and directors and consumers is critical in the planning phase of such an effort so the program can get a good idea of what is needed in the marketplace. Otherwise, graduates of such an innovative project may find that their skills are too far advanced for the needs of the community.

Recommendations for program "adopters" are:

- An introduction to the system

  The adoption of an innovative model such as this requires major curriculum changes. The Project Director feels that at minimum a two-week, in-service summer workshop is needed to orient and train future participants in the program. Florida State University is planning to produce a manual which can serve as a basic guide for the conduct of such a workshop.

- Faculty skills in systems technology

  Any program wishing to adopt the current model should have at least one faculty member who is skilled in systems technology and evaluation; these skills are essential not only for the successful operation of the program, but also for the initial interpretation of program requirements and activities to other faculty members who do not possess such knowledge.

- Participation in outside training institutes

  Institutes in leadership training and innovative teacher training are frequently offered in various regions and by the Bureau of Education for the Handicapped itself; programs wishing to implement a model such as the one at Florida State should encourage their staff to take part in such institutes.

- Administrative commitment to the program

  Members of an educational institution (university or college) wishing to institute such a program should first ensure administrative support of such an effort, since the transition from a time-based to a performance-based curriculum requires a number of accompanying changes in record-keeping and similar administrative activities. In many cases, administrative support is also necessary so the program can get permission for leave time for teachers who wish to learn new performance-based techniques.

FOR FURTHER INFORMATION

For further information about the Clinical Teacher Model, contact:

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MATERIALS AVAILABLE

The following materials are available upon request from the Clinical Teacher Model Project:

Descriptive Brochure of Clinical Teacher Model (no charge)

Dissemination of Documented Prototype Performance-Based Teacher Education Curriculum (scheduled for 1974-75)

THE DIVERSIFIED OCCUPATIONS PROFESSIONALS DEVELOPMENT PROGRAM

BURLINGTON, VERMONT

A statewide training program in career-oriented education for teachers of the handicapped.

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TABLE OF CONTENTS

PART		PAGE
ONE:	INTRODUCTION	1
	Overview	1
	Context of the Program	1
TWO:	NOTABLE FEATURES	3
	Professionals Team Concept	3
	The D.O. Professionals Competencies List	4
THREE:	PROGRAM OPERATIONS	6
	The Diversified Occupations Concept	6
	Structure of Professionals Development Training	6
	Content of Professionals Development Training	8
	Task Analysis Format	11
FOUR:	PEOPLE IN THE PROGRAM	14
	Staff	14
	Students/Participants	15
	Community	16
FIVE:	PROGRAM EVALUATION	17
SIX:	RECOMMENDATIONS AND FURTHER INFORMATION	19
	Recommendations for Replication	19
	For Further Information	20
	Materials Available	20

PART ONE:

INTRODUCTION

OVERVIEW

The Diversified Occupations Professionals Development Program trains education professionals for Vermont's Diversified Occupations (D.O., Program, which provides career-oriented education to high-school-age mentally retarded students. The Professionals Development Program was designed to sensitize D.O. professionals to the needs of their handicapped students and to provide them with vocational and special education skills.

As D.O. Programs have become operational in each of Vermont's 10 Area Vocational Centers, it has been necessary to recruit qualified personnel to staff D.O. Labs-- specially designed and well-equipped classrooms which offer a variety of vocational education courses and which act as a halfway step for students in their transition from segregated settings to integrated classrooms. Because personnel seldom have the necessary backgrounds in both vocational and special education skills, the Vermont Department of Education enlisted the support of the University of Vermont's Vocational Education and Technology Department (VOTEC) to create a D.O. Professionals Development Program which would offer specialized training for those already teaching D.O. students and would prepare UVM students for future careers in the D.O. Program.

CONTEXT OF THE PROGRAM

Initiated by Vermont's Department of Education in 1965, the D.O. Program called for the development of a comprehensive state-wide program of career-oriented education for secondary-level special students and for the inclusion of D.O. Labs in the state's union high schools. An additional thrust came from 1968 federal legislation which specified that 10% of all federal monies for vocational education must be allocated to education for the handicapped. As D.O. Programs became operational in several regions, the state recognized a critical need for manpower with special skills. Accordingly, the state's departments

of Special Education and Vocational Education joined forces to fund a UVM training program for 23 D.O. Specialists and high-school administrators during the summers of 1970 and 1971. An Office of Education, Bureau of Education for the Handicapped grant further helped the Department of Education to coordinate emerging training programs and expand course offerings throughout Vermont.

Today, UVM's Department of Vocational Education and Technology (VOTEC) offers a Diversified Occupations specialization which functions specifically as the training arm for the state's D.O. Program. Home-based on the University's Burlington campus, the Professionals Development Program offers inservice workshops, summer institutes, evening and full-year credit courses. Area Vocational Centers are also used for training and student practicum experiences.

The D.O. Professionals Development Program is a joint venture of Vermont's Department of Education and UVM's VOTEC Department. The Department of Education serves administratively and financially as the primary sponsor; state and federal monies earmarked for the program are coordinated by the Department which in turn subcontracts with the University to design and implement the training. Funding for fiscal 1973 is approximately $80,000, of which the federal share (BEH) is 43%; the state's share (through several agencies) is 40%; and the University's share (in the form of fellowships) is 17%.

In addition to the 10 D.O. Programs now operating in Area Vocational Centers, two more programs are slated to begin in 1973 as new centers are completed, and three additional programs will be implemented in older centers re-designed for the D.O. concept. Currently, some 340 education professionals are involved in the Professionals Development Program. In the first year of the program (1971-1972), highest priority was placed on pre- and in-service training for D.O. Specialists, those who actually teach in D.O. Labs. Emphasis this year will be on training new specialists and regular high-school vocational teachers and administrators.

PART TWO:

NOTABLE FEATURES

The most noteworthy aspect of the Professionals Development Program is not so much a particular feature as it is the process this program has developed: the process of building a comprehensive ongoing training program specifically designed to meet Vermont's needs. In order to carry out this process, the training program had to reach out across the state and initiate concepts and techniques which could be implemented consistently and uniformly in all sites. The creation of this manpower training program has been facilitated by the development and use of the Professionals Team Concept and the D.O. Professionals Competencies List.

PROFESSIONALS TEAM CONCEPT

In order to implement a comprehensive, state-wide program consistent with general D.O. objectives, the project staff had to develop a multiple approach to Vermont's manpower needs: a standardized instructional program adaptable to a whole spectrum of professionals who function in the educational sector and the community, and who are equipped to meet the needs of special students. This broad-based training concept emerged as project staff began to identify various strata of personnel likely to come in contact with the handicapped student. These people are:

- Personnel most closely associated with D.O. pupils, the Diversified Occupations Specialists who teach students in the D.O. Labs.
- Education professionals directly supporting pupils after their initial participation in D.O. Labs, including (1) Occupational Education Specialists and Related Academic Teachers who will hopefully integrate D.O. students into their regular classrooms in the Area Vocational Centers (AVCs); (2) Guidance Counselors, Work Placement Counselors, Directors of AVCs, Administrators and other supportive personnel.
- Elementary and Middle Level Special Education Personnel who may assist and prepare pupils for entrance into the D.O. Program.
- Undergraduate and Graduate Students preparing to enter the education professions.

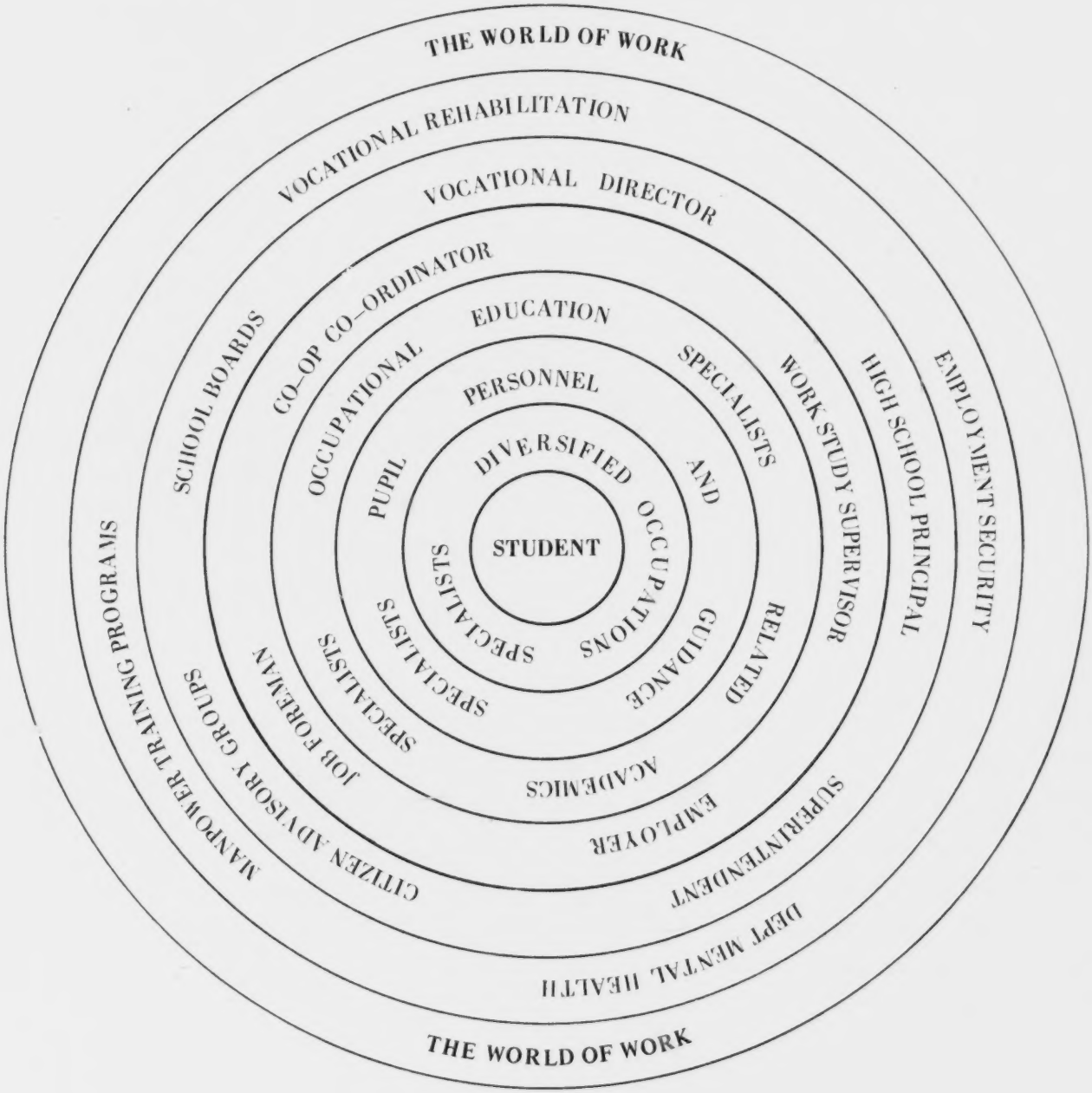
The idea was shaped into a conceptual format for the training program with the development and formalization of the Professionals Team Concept. As depicted in the diagram on page 5 , the concept focuses on the various groups of potential trainees and their "proximity" to the D.O. student, identifying where each teacher and professional will be involved in the student's progress through the school system and into the world of work.

THE D.O. PROFESSIONALS COMPETENCIES LIST

After members of the D.O. Professionals Team had been identified, it became necessary to establish uniform minimum skills expected of this whole spectrum of professionals. The training project consequently developed the D.O. Professionals Competencies List, a comprehensive checklist of skills and attitudes to be used in the training of all members of the Professionals Team. The Competencies List delineates over 200 skills needed by various educators in areas such as planning of instruction, guidance, general school activities, public and human relationships.

The checklist has been specifically designed for use as an ongoing evaluative instrument for both trainees and project staff. Trainees are required to assess their skills according to the checklist and to prioritize their own deficiencies and training needs. These individual competency assessments are weighted and computer-processed to establish group training priorities for the project. The group priorities help shape the focus of the courses and workshops. Individual competency assessments are also used by the training staff and the trainees to measure subsequent progress in the acquisition of skills.

DIVERSIFIED OCCUPATIONS



EDUCATION PROFESSIONALS TEAM

PART THREE:
PROGRAM OPERATIONS

THE DIVERSIFIED OCCUPATIONS CONCEPT

When they enter the D.O. Program as high-school freshmen, special students are given the chance to explore a variety of "real world" occupations simulated in the D.O. Labs in areas such as building and automotive trades, electricity, child care, graphic arts, business and health occupations, homemaking, and many more. After their aptitudes and interests have been assessed by D.O. Specialists, concentrated training is offered in their strong areas. Training is also provided in general social skills and in academic subjects. Once students acquire the basic skills they need, they may enter regular vocational and/or academic classes in their high school, usually by their junior or senior year. They enter regular classes with a head start since in the regular program Vermont freshmen and sophomores are not offered vocational training.

STRUCTURE OF PROFESSIONALS DEVELOPMENT TRAINING

All of the education professionals who work with special students-- from D.O. Specialists to regular vocational and academic teachers, guidance counselors and high-school administrators--need both special education and vocational education skills to be effective. The kinds of training provided to D.O. personnel vary according to each person's individual training needs and her/his available time. Obviously, students enrolled in full-year courses receive more intensive training than those whose participation has been limited to a weekend workshop. The general kinds of courses and institutes to be offered this year include:

Title	Description	Credit Arrangements
Special Topics: Understanding Vocational Students Having Learning Handicaps	Investigation of the techniques for diagnosing specific behaviors that interfere with normal instructional patterns and prescription of alternative instructional procedures to compensate for specific learning deficits.	3 Credits

Title	Description	Credit Arrangements
Special Topics: Laboratory Skill Development for Diversified Occupations Teachers	Participants will develop competencies necessary for teaching pre-vocational skills in essential career areas such as woodworking, metals, small engines and other practical arts. Participants will select areas of study and develop skills through individualized instruction and practical experience in related lab areas. Limited to 20 students approved by the department.	3 Credits
Special Topics: Curriculum Development for Students Having Learning Handicaps	Designed for teachers who instruct students with learning handicaps. Participants will develop competencies in curriculum development, diagnostic and prescriptive teaching, individualizing instruction, motivating students, and evaluating instructional outcomes.	3 Credits
Career Education for Special Students	Investigation into the components of a comprehensive career education matrix and the methods of implementing these components into career-oriented programs for handicapped learners.	3 Credits
New and Returning Teachers Course	Identification of instructional procedures and preparation of materials to be used when handicapped students integrate into regular vocational courses.	To be arranged
10 In-Service Training Sessions	Content related to specific requests of center or organization issuing invitation for in-service training.	To be arranged
2 Week-end Workshops	Content determined by questionnaires to Diversified Occupations specialists using delphi technique.	To be arranged
Independent Study	For students in vocational, technical and extension education. Lectures, laboratories and/or readings and reports, to provide students with background and specialized knowledge relating to a contemporary area of study. PREREQUISITE: departmental permission before enrolling.	To be arranged

CONTENT OF PROFESSIONALS DEVELOPMENT TRAINING

The Professionals Development Program utilizes the "ODPRIME" system to organize the concepts it covers in training. ODPRIME is a system or format, initially developed by Alpha Learning Systems, Inc., which focuses on the delivery of educational services. Each of the letters in ODPRIME stands for a fundamental training concept dealt with in the program's courses, in-service training, workshops and institutes.

O = Formulation of Objectives of Learning Activities
D = Diagnosis of Learner's Instructional Needs
PR= Prescription of Instructional Activities of the Learner
I = Instruction of the Learner
M = Motivation of the Learner
E = Evaluation of the Learner's Degree of Achievement of Objectives

ODPRIME serves two functions in the training program. It is used by the Professionals Development staff as a means of organizing their training for D.O. personnel. D.O. personnel in turn are trained to use this model in designing their training for their students. Generally, the following kinds of issues are covered by ODPRIME.

O: Formulation of Objectives of Learning Activities

Under this component, trainees are introduced to the concepts of job analysis and task analysis in developing learning objectives for their D.O. students. Trainees are taught to break down jobs into their components and requisite skills (job analysis) in order to evaluate their appropriateness for educable mentally retarded students. Jobs are analyzed in terms of 1) the skills necessary for a student to be able to perform the job successfully in the working world; and 2) the "minimum expected" objectives (MEOs) necessary for a D.O. student to integrate successfully into regular classes in the AVC for training in this job area.

Trainees then learn to further subdivide and sequence each component of the job into individual tasks and substeps (task analysis), assessing the skill requisites of each step in the job process, particularly skills such as coordination, dexterity, conceptual abilities in math, reading, writing, and so on. As part of the training in this component, trainees are required to perform job and task analyses on at least two local jobs in their communities. Task Analysis Forms (Figure 1) are included at the end of this chapter.

D. Diagnosis of Learner's Instructional Needs

Trainees are introduced to techniques for assessing and diagnosing a student's individual needs by:

1. Administering standard reading inventories;
2. Interpreting students' records and tests administered upon admission to the AVC (reading tests, vocational aptitude and interests tests, etc.);
3. Developing and utilizing job samples in the D.O. occupational clusters -- how to conduct both product and process evaluations of the students' job samples.

Trainees are encouraged to develop their own diagnostic techniques when standard measurements fail. For example, one D.O. Specialist developed an assessment kit to measure the tolerance and frustration levels of students under simulated work conditions. Others have developed ways to measure a student's ability to integrate into regular classrooms and activities using indices such as physical proximity and verbal interactions.

PR: Prescription of Instructional Activities of the Learner

Once trainees can formulate objectives and diagnose learning needs, they learn to prescribe instructional activities which are appropriately geared to the student's reading and conceptual levels, which coordinate the student's aptitudes with interests, and which capitalize on the student's strongest senses. The program uses simulated training, role-playing, career-oriented field trips, and instructional aids such as Language Masters, tapes, films, slides, and video-tapes.

I: Instruction of the Learner

The primary instructional format used is the "Learning Activity Package" (LAP), a self-paced, self-contained set of teaching/learning materials sequentially arranged in small components. Trainees are taught to revise standard LAPs in vocational education and to create new ones more appropriate to the capacities of D.O. students. This generally involves breaking down standard LAPs into smaller, more basic packages, rewriting them for appropriate reading levels, and developing media alternatives which stress multi-sensory approaches to learning. As LAPs are revised and new materials are developed in the various occupational clusters, lists of these materials are circulated to staff in all of the AVCs to encourage their use and prevent duplication of effort.

M: Motivation of the Learner

One of the basic motivational techniques introduced to trainees is behavior modification through positive reinforcement, shaping, cueing and prompting. Token reinforcement and contract systems are put forward as possible student motivators, and trainees also receive instruction in behavior observation and recording techniques.

E: Evaluation of Learner's Degree of Achievement of Objectives

This component introduces behavior-oriented checklists which measure student acquisition of specific skills. In addition, the State Department of Education's Project Director trains D.O. teachers in the student evaluation format required by the Division of Special Education and Pupil Personnel Services. For further information on trainee involvement in self-evaluation techniques and in evaluation of the program itself, see Part Five.

As the Professionals Development Program continues to evolve, new needs are constantly being identified. Plans for the future include packaging the training courses and materials so they can be disseminated and utilized for on-site, in-service training purposes in programs both in and outside Vermont. The learning packages will deal with the most pressing training needs of current D.O. personnel. Because of the enormous time demands on D.O. personnel and because of the problems of geographic accessibility, the program has not been able to extend itself to all personnel in need. By packaging materials, personnel could be trained at their own sites at their own paces.

Figure 1.

A Job and Task Analysis
of Distributive Education

Distributive Education has been broken into six general areas:

1. General Employment
2. Stockkeeping Skills
3. Receptionist Skills
4. Sales Skills
5. Advertising Skills
6. Cashiering Skills
7. Bagging Skills

1. General Employment Qualifications:

   a. Math Ability - Since virtually every distributive occupation requires math knowledge, the student should have at least a minimal understanding of math functions.

   b. Speech Ability - For students planning to be employed where they will be in contact with the public, a minimal ability to handle English grammar is necessary. Also the confidence to interact with the customer when necessary.

   c. Spelling Ability - For the purpose of filling out and reading business forms (applications, letters, sales slips, invoices, etc.) the student must have some knowledge of spelling and reading.

   d. Employment Source Info. - For the purpose of ultimately securing reasonable employment through his own effort, the student should be acquainted with want ads, employment offices, and employment services in his area.

   e. Interest - A student entering the vocational training should have an interest in some aspect of the distributive field.

   f. Personal Appraisal - Before entering the training program leading to eventual placement, the student should have some idea of the special characteristics and qualifications in the various occupational groups and be aware of his own potential within that field that he prefers.

2. Stockkeeping Skills:

Possible Job Tasks	Skills Required
Receive shipments	1. Math to the extent of counting, adding and subtracting. Some knowledge of money mathematics.
Check shipments against an invoice	
Mark merchandise	
Move merchandise and store in correct area	2. Ability to read invoices and similar business forms.
Sweep floors	
Empty trash	
**Possible window arrangements	3. Physical ability to handle heavy objects.
Strip and wax floors	
Prepare merchandise for transit	
Inventory	4. Some knowledge of display.

**Denotes skills that may be above the level of some of the students.

3. Receptionist Skills:

Possible Job Tasks	Skills Required
Answer phone	1. Adequate speech
Record simple messages correctly	2. Proper Phone technique
Ability to read business forms	3. Legible writing
Place phone calls	4. Personnel management training
	5. Human relations training

4. Sales Skills:

Possible Job Tasks	Skills Required
*Sales pitch	1. Math fundamentals
Ring up sales	2. Speech ability
Meet people	3. Read tax charts
Answer questions about merchandise	4. Legible writing
Light area clean-up	5. Ability to meet people
Ability to fill out simple business forms	

5. Advertising Skills:

Possible Job Tasks	Skills Required
Poster preparation	1. Spelling ability
**General store and window display	2. Grammar ability
*Possible ad layouts for newspaper	3. General ad and display training
**Radio ad preparation	4. Knowledge of buying motives

6. & 7. Cashier and Bagging Skills:

Possible Job Tasks	Skills Required
**Register operation	1. Math ability
Sales slip preparation	2. Register operation
Checkout operation	3. Tax and unit price chart reading
Bag merchandise	4. Grammar
General area clean-up	5. Human relations training
Keeping supply of bags at station	6. Making change
Helping customers with packages	
Keeping carts in proper location	

Task Difficulty

no mark	relatively simple
*	moderate difficulty
**	difficult

Minimum Expected Objectives For Two Areas

General Employment

*1. Given several pre-employment math tests similar to those used in downtowm stores, the student will complete them with at least 80% accuracy. (No time limit.)

*2. Through informal discussion, the student will display grammatical proficiency by conversing in intelligent sentences. He will also show self-confidence through the way he reacts to questions.

3. Given a spelling test of 25 common words, the student will correctly write the given words with at least 90% accuracy.

*4. After having successfully completed three different job applications correctly, the student will complete one in class, at his own speed, that is free from spelling errors and cross-outs.

**5. Given adequate in-class practice, and given examples to follow, the student will correctly complete a resume that is free from grammatical and spelling errors.

*6. Given adequate practice and examples to follow, the student will compose a letter of application that is free from spelling and grammatical errors.

7. Given a personal evaluation form and in-class discussion, the student will evaluate himself and determine the possible occupational fields for which he qualifies.

8. Given a local newspaper, the student will locate at least one job for which he may qualify in the field of distribution.

9. Through an informal discussion, the student will show his depth of interest in distributive employment.

Receptionist

*1. Given in-class experience, the student should be given a practical exercise through which he can demonstrate proper telephone procedure and etiquette. This should include:

1. Answering a call and recording a message.
2. Handling a call in which the caller wants information.
3. Placing an informational call to another firm.

*2. Given in-class practice, including role-playing exercises, the student will display the ability to handle personnel management and human relations through solving case problems involving the necessary principles.

*3. Through role-playing situations the student will display positive traits of self-confidence, courtesy, tact, and receptionist procedures.

Task Difficulty

no mark	relatively simple
*	moderate difficulty
**	difficult

PART FOUR:

PEOPLE IN THE PROGRAM

STAFF

The program has three core staff and draws support from both the University and the State Department of Education. Two of the core staff are part-time on the project and have been with it since its inception. Monitoring the program for the State Department of Education is a consultant to the Special Educaiton Division who spends 35% of his time assisting the UVM Project Director with planning and conducting pre- and in-service training and with the development of the instructional program. In addition to his title as Project Director for the State Department of Education, the consultant is also an adjunct faculty member in the VOTEC Department. This unique dual affiliation ensures coordination between State and University and has become a good working relationship.

The Project Director for the University of Vermont is the Chairman of the VOTEC Department who has also been involved with D.O. training from its inception in Summer 1970. His responsibilities parallel those of the State Department of Education consultant, although only 10% of his time is available to the project.

The full-time Project Coordinator is an instructor in the VOTEC Department. His activities focus on the development, preparation and dissemination of instructional materials adaptable to a wide range of student needs. The Project Coordinator conducts extensive primary research related to career education, occupational education and academic education for the program; reviews available resource material; and implements research findings into the D.O. Program. In addition, he works with other colleges and departments within the University and with special interest groups in the community to promote career-oriented education for the handicapped and to sensitize the public to the needs of special populations.

While the three core staff are primarily responsible for coordination of the project, developing instructional materials and in-service training and teaching, substantial additional resources are available to them. Two professors from the VOTEC Department assist with aspects of graduate and undergraduate programs directly related to Professionals Development. Thirty consultants are also

available, especially for pre- and in-service training workshops. For the most part, these consultants are State Department of Education personnel or former D.O. Specialist trainees who have demonstrated excellent skills in both vocational and occupational education and in teaching and understanding the educably mentally retarded. The D.O. Specialists who serve as trainers are all graduates of the training program and have taught in D.O. Labs for at least a year.

Other manpower and instructional resources are available at no cost to the training team. Specifically, the project staff have called upon the Area Manpower Institute for the Development of Staff (AMIDS) to provide multi-media and multi-sensory workshops for teacher trainees and for general consultation. Many instructional and training materials are also acquired through the New England Resource Center for Occupational Education (NERCOE), a group which coordinates teacher training, research and curriculum development in the area of occupational education. Because of a financial agreement between the Vermont State Department of Education and NERCOE, the program is entitled to use NERCOE's services at minimal or no cost. Core staff have recently called on NERCOE personnel for a literature search on work samples and for assistance with a video-tape workshop.

STUDENTS/PARTICIPANTS

Of the roughly 340 trainees in various phases of the Professionals Development Program, approximately 10 are undergraduate students in the VOTEC Department specializing in the D.O. or related vocational concentrations; 20 are undergraduate or graduate students from other UVM departments enrolled in D.O. courses; 25 are Diversified Occupations Specialists; 200 are Occupational Education Specialists; 30 are Related Academic Teachers; 20 are administrators and other supportive personnel; 30 are elementary and middle-level special education personnel. Trainee involvement in the program ranges from full- and part-time undergraduate and graduate study at the University to in-service training meetings, week-end workshops, summer institutes and evening courses.

Recruitment and Selection

Recruitment procedures differ according to the type of personnel being trained. Undergraduate D.O. students are recruited within the VOTEC Department and other

related departments (education, special education, and so on). The program uses brochures, newsletters, referrals from AVC Directors and State Department of Education personnel and speaking engagements by the Project Coordinator to get its message across to the University community.

Many D.O. Specialists enroll in a six-week summer course as part of their pre-service training. Those already in the field may be approached by the Project Coordinator or a State Department of Education consultant and encouraged to take the summer or evening courses as part of their in-service training.

Because Occupational Education Specialists, Related Academic Teachers, Administrators and other supportive personnel have often had no previous experiences with handicapped students, they may need to be sold the D.O. concept. The Coordinator and the State Department of Education's consultant try to generate interest by speaking at in-service and staff meetings in the Area Vocational Centers.

The Professionals Development Program has tried to arrange its courses in blocks of time convenient to the teachers' needs. This has meant organizing week-end workshops, summer sessions, and one-week courses. University of Vermont credit is offered to the trainees and small stipends are provided when available.

COMMUNITY

Because the Professionals Development Program provides training to AVCs throughout Vermont, its linkages with communities are state-wide. Each D.O. Program is encouraged to form an Advisory Council composed of D.O. teachers and representatives of industries, the Chamber of Commerce, special education, social welfare and vocational rehabilitation agencies. These Councils advise local boards of education in policy areas such as course offerings, equipment, graduation requirements, and so on. The Professionals Development Program has maintained close contact with these Councils in order to get their feedback on the training program and on the training needs of D.O. personnel.

Informally, the program's staff constantly reach out into the community to potential supporters and advocates of the D.O. concept, speaking to civic organizations, providing materials and training to special interest groups in vocational rehabilitation, social welfare, and education. Recently, the Trade and Industrial Education Association, a state-wide organization of trade and industrial teachers, requested a 2-credit course on the career education of the handicapped and are currently being trained by the D.O. staff.

PART FIVE:
PROGRAM EVALUATION

Since this program is only in its second year of operation, many different forms of evaluation are currently being built into the project. Professionals Development staff have tried to use and adapt existing evaluative models in an effort not to "reinvent the wheel," but have also found it necessary to develop some of their own materials.

Evaluation of Trainees

Students' training needs are evaluated both by the trainees themselves and their instructors, primarily through the use of a list of minimum teacher competencies--the Diversified Occupations Professionals Competencies List--developed by program staff. The D.O. Professionals Competencies List has been treated in Part Two, Notable Features.

Evaluation of Instructors and Courses

Trainees evaluate their instructor's teaching performance at the end of each course, workshop or institute by means of a standard course and teacher evaluation checklist developed at the University of Illinois, and by an instructor evaluation checklist developed by program staff. Instructors evaluate their own performances using the Illinois checklist and compare their self-ratings with those assigned by their students. Where there are wide variations between instructor and student ratings, instructors are asked to explain the discrepancies. The goal is systematic feedback from students on teaching performance and course content to upgrade techniques.

Instructors receive informal student feedback from the "New and Returning Teachers" course for both new teachers entering the D.O. Program and those already involved. This course, which covers issues and problems experienced by teachers in their D.O. Programs, also points out to instructors the current training needs of personnel. By focusing on some of these needs and problems, instructors get valuable feedback on gaps or weaknesses in past Professionals Development courses.

Evaluation of Overall Program Impacts

During the first year of program operation, an initial evaluation of its impacts was conducted by an outside evaluator from the University of Wisconsin. The structure for this evaluation was somewhat informal, describing narratively the training objectives which have been achieved thus far in the program -- for example, the numbers and kinds of personnel reached, the format of the training courses, and so on. Generally, this evaluation found that the project appeared "quite viable and was in the process of completing a state-wide system of innovative vocational services drastically needed."

After attending a two-week conference on evaluation sponsored by BEH for its grantees in Utah in August 1971, the State Department of Education Project Director and the Project Coordinator, in conjunction with the Utah staff, developed an Evaluation Data Format which specifies the evaluation objectives, data requirements, techniques and instruments, and evaluation activities necessary to assess project impact. The University of Wisconsin consultant will use this format in his 1972-73 evaluation.

The project would also like to indirectly measure its impact by measuring student progress in the D.O. program itself. The staff hope to conduct a statistical evaluation of D.O. student progress -- how many are placed in jobs, how many are integrated into regular classrooms, how many are graduated with what kinds of skills, etc.-- to help them determine whether their training courses are actually helping prepare staff to meet the needs of the D.O. students.

PART SIX:

RECOMMENDATIONS AND FURTHER INFORMATION

RECOMMENDATIONS FOR REPLICATION

Several important factors made it possible to implement a unified, state-wide program of career-oriented education in Vermont:

- An already existing broad-based occupational education program in Vocational Centers

  The training program was initially formulated in response to a very specific and critical need--to staff the already existing D.O. Labs--rather than in response to diffuse or vaguely conceived future needs. From its inception, the training project was closely coordinated with an already existing state-wide plan for the D.O. Program, a plan which provided a natural framework for the training effort and identified early in the start-up who was to be trained where, and what objectives of the training would be. Moreover, the program was designed pragmatically to focus only on critical needs of selected educators at important junctures in their personal career development and in the phased implementation of the D.O. concept. The training program has become a more ambitious venture only as the D.O. Program itself has matured and as standardized training materials and methods have been tested and refined prior to wide dissemination throughout the state.

- Staff with strong backgrounds in vocational and occupational education as well as special education

  Traditionally, training for the handicapped has been left only to special educators. But D.O. personnel need trainers who understand the occupational education needs of the students as well as issues relating to special education. All of the project staff view themselves as occupational educators with a special concern for the handicapped rather than as special educators with an interest in vocational education.

- Cooperative agreements and cost-sharing between state agencies and the University of Vermont

  The working relationship between the University of Vermont and the State Department of Education must be cited as a critical factor in implementing a uniform, state-wide

training program. Close cooperation and coordination of efforts were essential for VOTEC to support the state's teacher education activities and to conduct related and scholarly research work consistent with the goals of both the University and Vermont's Department of Education. This working relationship has also resulted in significant economies with respect to staffing, facilities and instructional materials appropriate for both the University degree program and the training of already employed secondary school educators.

FOR FURTHER INFORMATION

For further information about the D.O. Professionals Development Program contact:

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MATERIALS AVAILABLE

The following materials are available upon request from the Diversified Occupations Professionals Development Project at cost for duplication and mailing:

Criterion Referenced Achievement Monitoring Manuals (30-40 pp.) for:

- Woodworking
- Metal Work
- Gardening & Grounds Keeping
- Food Service
- Homemaking
- Mathematics
- Reading

Observation instructions and recording format for recording learning behaviors (field tested)

Numerous teacher developed instructional materials in the areas of homemaking and related academics

Modules for regular vocational teachers about teaching handicapped students

THE MARK TWAIN TEACHER INTERNSHIP PROGRAM

ROCKVILLE, MARYLAND

A performance-based teacher training program which uses seminars and practica to help already-experienced teachers learn to deal with children with special needs.

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TABLE OF CONTENTS

PART		PAGE
ONE:	INTRODUCTION	1
	Overview	1
	Context of the Program	1
TWO:	PROGRAM OPERATIONS	4
	Structure of Training	4
	Content of Training	5
THREE:	NOTABLE FEATURES	8
	The Mark Twain Internship Concept	8
FOUR:	PEOPLE IN THE PROGRAM	11
	Students/Participants	11
	Staff	12
	Community	14
FIVE:	PROGRAM EVALUATION	16
	Evaluation Design	16
	Evaluation Activities	17
SIX:	RECOMMENDATIONS AND FURTHER INFORMATION	19
	Recommendations for Replication	19
	For Further Information	20
	Materials Available	21

PART ONE:

INTRODUCTION

OVERVIEW

The Mark Twain School in Rockville, Maryland, serves 200 students of average or higher intellectual ability, ages 11 to 19, with learning or emotional difficulties. Complementing the Mark Twain School are a variety of Mark Twain programs in public schools which provide special help for students and consultation to staff. A primary aim of the Mark Twain School-Based Programs is to train teachers to deal with children in a variety of settings. Mark Twain staff believe that student growth and progress hinge on the skill, sensitivity and flexibility of faculty members. Service to pupils is seen as intertwined with staff development: one is partner to the other.

The Mark Twain Internship Program is a 10-month effort which is currently training eight participants. Still in the development phase, the program uses a performance-based curriculum to help already experienced teachers achieve competency in five basic areas: psychoeducational assessment; human relations and counseling; curriculum development and implementation; behavior management; and systems analysis and consultation. Interns participate in seminars, individualized instruction, and practica at both the Mark Twain School and at one of 12 public schools offering Mark Twain Programs. The programs are of two types: a Student Resource Teaching model and an Instructional Team model. Interns spend at least one of three 11-week learning sequences in one of these two programs, and at least one at Mark Twain School: the third sequence depends on the intern's future teaching plans. Staff feel the Internship's practicum feature offers experienced teachers a viable alternative to university-based higher education.

CONTEXT OF THE PROGRAM

In 1963 the Board of Education and the Montgomery County Council sponsored a project undertaken by the Joint Committee of Youth Services to make recommendations for the improvement of education and allied services in Montgomery County, Maryland for young people with special needs. One of the project's recommendations

was for the development of multi-level school programs for the evaluation, education and adjustment of emotionally handicapped youngsters in three kinds of settings:

- A year-round program in a special school for seriously handicapped adolescents;
- Programs in selected junior and senior high schools for students able to function with appropriate support in their regular school environment; and
- A satellite school for mildly retarded adolescents who are emotionally handicapped.

Plans for the Mark Twain School, which would fulfill the first part of this recommendation, were developed by the Office of Planning for Supplementary Educational Services of the Board of Education and funded by the Office of Education, Bureau of Education for the Handicapped, in March 1968. During the following two years, planning committees worked out details for the architectural design of the school, program operations, staff selection and training. These committees included teachers, counselors, psychologists, administrators, state and county personnel, and private citizens. Five core staff, including the Program Director were assigned to implement the program. Thirty-eight teachers were selected from within the Montgomery County School District for the Mark Twain Staff Development Institute, a six-month program which began in July 1971. Core staff and consultants provided instruction in assessment and programming; interpersonal relations; curriculum implementation; individualized instruction; behavior management; current issues in special education; adolescent problems and development; individual and group counseling; and research and evaluation.

In February 1972, when the Mark Twain School opened with 150 students, Institute participants filled the majority of staff positions. However, staff development did not end with the completion of the first Institute. Former participants now help train the eight members of the Mark Twain Internship Program. Curriculum and training activities are being developed and refined during this second program, which graduated its first group of interns at the end of the 1972-73 school year.

The Mark Twain Staff Internship Program is sponsored by the Montgomery County Public Schools and funded by federal and county monies. A two-year program budget for 1973 and 1974 totals approximately $156,500. The County Public School System pays the salaries of most of the Mark Twain faculty and between 50 and 60% of the regular salaries of six of the current interns, and furnishes lecturers and consultants from many of its Departments for the Internship Program. Cost per intern in the future, when the program plans to train 15 at a time, should be about $5,200.

PART TWO:

PROGRAM OPERATIONS

STRUCTURE OF TRAINING

The 10-month Teacher Internship Program is divided into four learning sequences: an initial five-week segment (late August and September), and three 11-week sequences (fall, winter, and spring) designed to keep pace with interns' developmental needs (beginning, for example, with general problems of adolescents and ending with considerations in consulting with other teachers). Each 11-week sequence is followed by a one-week period of review and evaluation during which interns are expected to demonstrate competencies gained during the sequence, complete instructional assignments, and participate in program- and self-evaluation. At the end of the year, there will be a formal, written evaluation of trainees based on the evaluations conducted at the end of each sequence.

The program itself is organized around five basic trainee competencies. Each Competency Area Coordinator defines sub-competencies in his specific area and identifies relevant performance objectives. At present, 18 sub-competencies and 50 performance objectives have been specified. The five basic areas, together with examples of sub-competencies and performance objectives, are as follows:

- Psychoeducational Assessment and Programming

Three sub-competencies relate to the trainee's ability to complete psychoeducational profiles; to use these profiles in planning programs for individual students; and to consult with other teachers in effectively implementing these programs. Performance objectives for the first sub-competency, for example, involve the ability to administer and interpret assessment instruments in the affective, perceptual, cognitive and educational domains, and to integrate data from these instruments into a valid psychoeducational profile.

- Human Relations and Counseling

The three sub-competencies listed here relate to the ability to communicate and interact genuinely and effectively in an educational setting. Performance objectives are the demonstration of genuineness, respect, specificity, self-awareness, and empathy in a counseling interaction.

- Curriculum Development and Implementation

Six sub-competencies are listed here, relating to the management of the learning environment; development of appropriate curricula for students; selection of resource materials; planning and implementation of teaching strategies, and so on. One performance objective is demonstration of the ability to integrate strategies from various sources into a curriculum appropriate to students.

- Behavior Management

Sub-competencies include establishment of reasonable behavioral standards for students and identification and resolution of student problems which lead to the disruption of these standards. A related performance objective is the application of various interviewing principles in practicum situations.

- Systems Analysis and Consultation

Sub-competencies relate to the ability to formulate and ocmmunicate concepts of family and community systems; to use organizational processes for resolving student conflicts; and to consult with others in understanding student and staff behavior within a system. An example of a performance objective here is demonstration of the ability to assess how family, community, and educational factors affect student functioning in a particular school setting.

Precise course content is still being developed. It is expected that by the end of 1973, Competency Area Coordinators will have completed a full instructional curriculum for each area, including relevant objectives, learning activities, resource materials, and evaluation criteria. In addition, it is expected that current performance objectives will be translated into behavioral objectives. A core set of objectives would be required for all students, while others will be electives, depending on each student's strengths and weaknesses and plans for future teaching.

CONTENT OF TRAINING

Mark Twain's learning experiences are seminars, practica, and individual study. Seminars are instructor-managed groups which meet for a specified number of sessions. Nine have been offered this year, and individual sessions will continue throughout the fall, winter and spring sequences. Each seminar includes both

explicit subject content and spontaneous discussion. Seminars offered this year inlcude: "Psychoeducational Assessment and Programming;" "Adolescent Problems and Development;" and "Issues in the Education of Adolescents with Special Needs."

In practicum experience, the learner participates directly in activities that represent real samples of professional role function and responsibility. The practicum involves a total of 600 hours of practice teaching (20 hours/week during each 11-week sequence). Practice teaching assignments are changed between the fall and winter sequences so each intern can teach and observe adolescents in both the Mark Twain School and in a School-Based Program. Spring teaching assignments are made on the basis of interns' personal preferences and anticipated teaching plans for the future.

All trainees are provided regular time periods to pursue studies particularly suited to their personal needs and interests. Selection of individual study activities is based on factors such as self-appraisal of strengths and weaknesses and skill priorities for the trainee's future role in the Montgomery County school system.

In the course of the current school year, these three types of learning experiences are incorporated into a total of 16 separate in-service courses for Mark Twain interns. The titles of the courses, the competency areas in which they occur, and the number of credits assigned to each are shown on the table on the following page. Although the total number of credits for the 16 courses is 38, interns will be eligible for State Certification following completion of 30 in-service credits; they thus have some leeway in course selection. However, it is expected that interns will be able to demonstrate a satisfactory level of competency in each of the five basic areas, no matter which courses they select.

At present, 15 hours of in-service course work is equal to one credit toward certification and, as shown in Figure 1 following, each in-service course is worth a certain number of credits, depending on the length of time it involves. By the end of 1973, the program hopes to be able to attach credits to the attainment of specific performance objectives, rather than to hours spent in class. In this case, the student's demonstration that he has achieved a number of performance objectives in each competency area will allow him to obtain the necessary 30 in-service credits for certification. This arrangement will represent the implementation of a truly performanced-based program, one of Mark Twain's primary aims.

FIGURE 1. MARK TWAIN INTERNSHIP PROGRAM

Summary of In-Service Courses and Credits for 1972-73 Internship

Competency Area	Instructional Component	Credits
Psychoeducational Assessment and Programming	-Psychoed. Assessment Seminar	3* credits
	-Psychoed. Assessment Project (elective)	1 credit
Human Relations and Counseling	-Individual and Group Counseling seminar	3* credits
	-Counseling Project (elective)	1 credit
	-Techniques in Human Relations	1* credit
Curriculum Development and Implementation	-Curriculum Development and Implementation Seminar	4* credits
	-Curriculum Project	1* credit
Behavior Management	-Adolescent Development Seminar	1* credit
	-Behavior Management Seminar	3* credits
	-Behavior Management Project (elective)	1 credit
Systems Analysis and Consultation	-Systems Analysis and Consultation Seminar	3* credits
	-Systems Analysis Project (elective)	1 credit
Cross-Competency	-Issues in Special Education Seminar	1-3* credits
	-Analysis of Teaching Minicourse (elective)	1 credit
	-Adolescent Life Space Experience (elective)	1 credit
	-Practice teaching (600 hours)	10* credits
	Total	30 credits required (indicated by asterisks)

PART THREE:

NOTABLE FEATURES

THE MARK TWAIN INTERNSHIP CONCEPT

Mark Twain Internship staff feel that one of their program's most important features is that it represents a viable alternative for higher education for the training of teachers who work with special children. The internship system is not meant to replace university training, but can serve as one more possibility for post-graduate education of teachers who deal with emotionally- or learning-disabled children.

The Mark Twain Teacher Internship is characterized as a program "of and by doers": the same faculty who set the competency-based objectives for trainees and for the program itself are responsible for implementing them. These objectives were identified and refined by faculty as they learned from their own experiences in teaching emotionally handicapped children at the Mark Twain School, and are seen as appropriate for teachers who will be dealing with similar children. Moreover, the fact that they are based on the personal experiences of the faculty has increased staff commitment to implementing the objectives. In turn, participants in the program highly value the expertise of their own instructors, who themselves are continually dealing with handicapped children, and who are able to relate closely to the problems faced by interns.

The same is true of the program's competency-based curriculum, which is being created by the faculty as they teach, and represents an effective integration of theory and practice. The primary characteristic which distinguishes the Mark Twain Program from university-based training is its emphasis on the integration of practicum and seminar learning experiences. Most staff consider the practicum to be the proving ground for training at Mark Twain, with a number of advantages as a teacher-training tool. For example, one of the staff has recently co-authored a book on teaching self-control in the classroom: the book contains a model for managing frustration, and discusses how children can be taught to manage their own frustration. A seminar was based on this model, and interns were assigned to set up a teaching plan according to it and to implement this plan in their classrooms. Practicum coordinators and supervisors are familiar

with the model and are committed to helping interns with their assignment. Staff members who devised the model are always on hand to answer questions and to work through any problems interns encounter in using it.

Another advantage of a school-based practicum such as this is that it affords students increased opportunities for demonstrating their achievement of performance-based objectives. In the university, students are often limited to demonstrating their performance by means of video-tapes made during practice teaching. While this method is also used at Mark Twain, the program offers trainees a second opportunity for demonstrating their effectiveness: the practicum supervisor is constantly on hand to judge the trainee's attainment of various objectives according to previously agreed-upon criteria worked out with the trainee. Because university instructors are only occasionally present at practice teaching sites, this degree of coordination is often impossible.

The program is particularly well-suited to people who have already had successful experience in teaching. Many teachers in Montgomery County Public Schools have become frustrated with their own inability to deal effectively with handicapped children, and are looking for ways to modify their own techniques to better serve these children. They are primarily interested in better performance, and consider increased theoretical knowledge a more secondary benefit of their training. According to a Montgomery school system document entitled "Mark Twain Internship Project for the Preparation of Personnel in the Education of Adolescents with Special Needs",

> The demand for local school teacher development centers or 'teacher renewal' centers is increasing. Such centers may be able to retain the talents of experienced teachers and yet provide the needed experience and supervision to build new skills for coping with problem younsters. Teacher dropouts are frequently the result of self-blame for inability to help the unsuccessful child. Apathy or rigidity in teaching is often the product of repetitious experience, with limited opportunity for self-growth or change. Not only would school-based teacher development centers offer a more meaningful approach to training, they would help to remotivate veteran teachers. The Mark Twain Special Project presents an alternative mechanism for attracting and preparing manpower for education of youth facing serious problems in living.

Moreover, interns previously employed by Montgomery County Schools can be paid part of their annual salaries during their participation in the program. Job placement is guaranteed for teachers participating in the program while on Academic or "Unusual or Imperative" leave from the system. Although the school system cannot promise job placement to non-MCPS teachers who are being trained, the prospects for employment are very good.

PART FOUR:

PEOPLE IN THE PROGRAM

STUDENTS/PARTICIPANTS

The Mark Twain Teacher Internship Program currently has eight trainees selected from a group of 21 applicants. Participants are six women and two men, with prior classroom experience ranging from one to seven years. One intern holds a master's degree and four more are working toward graduate degrees at various local universities. Six interns were teaching in the Montgomery County Public Schools before entering the program. The school system allows teachers who have worked in the schools for seven years to take one year of academic leave with 50 to 60% of their annual salary. Since the program was interested in attracting a group with a broad range of experience, an arrangement was worked out whereby tenured system teachers with two to six years of experience could be granted "Unusual and Imperative" leave to participate in the program, and still receive 50 to 60% of their salaries. (Participant reimbursement depends on future commitment to the school system: if the trainee promises to teach for two years after his training, he receives 50% of his annual salary; three years rates 60%.) The two participants who had not previously taught in Montgomery County receive no salaries.

Recruitment and Selection

The recruitment procedure begins with an announcement of orientation sessions for the program in the MCPS Superintendent's Bulletin. Two of these sessions are held to provide interested teachers with basic information about the program and its potential advantages (as well as disadvantages). Reference materials on the program and the selection process are distributed.

The selection process itself consists of two phases. The Selection Committee for Phase I includes the Program Director, three Mark Twain Competency Coordinators, the Mark Twain School Principal, two representatives from the MCPS Department of Staff Development, and one from the MCPS Department of Professional Personnel. This committee conducts group interviews and reviews:

- A summary of the applicant's personnel folder;
- A supplementary application form designed to reflect applicant competencies in specific areas;
- Personal references obtained by telephone.

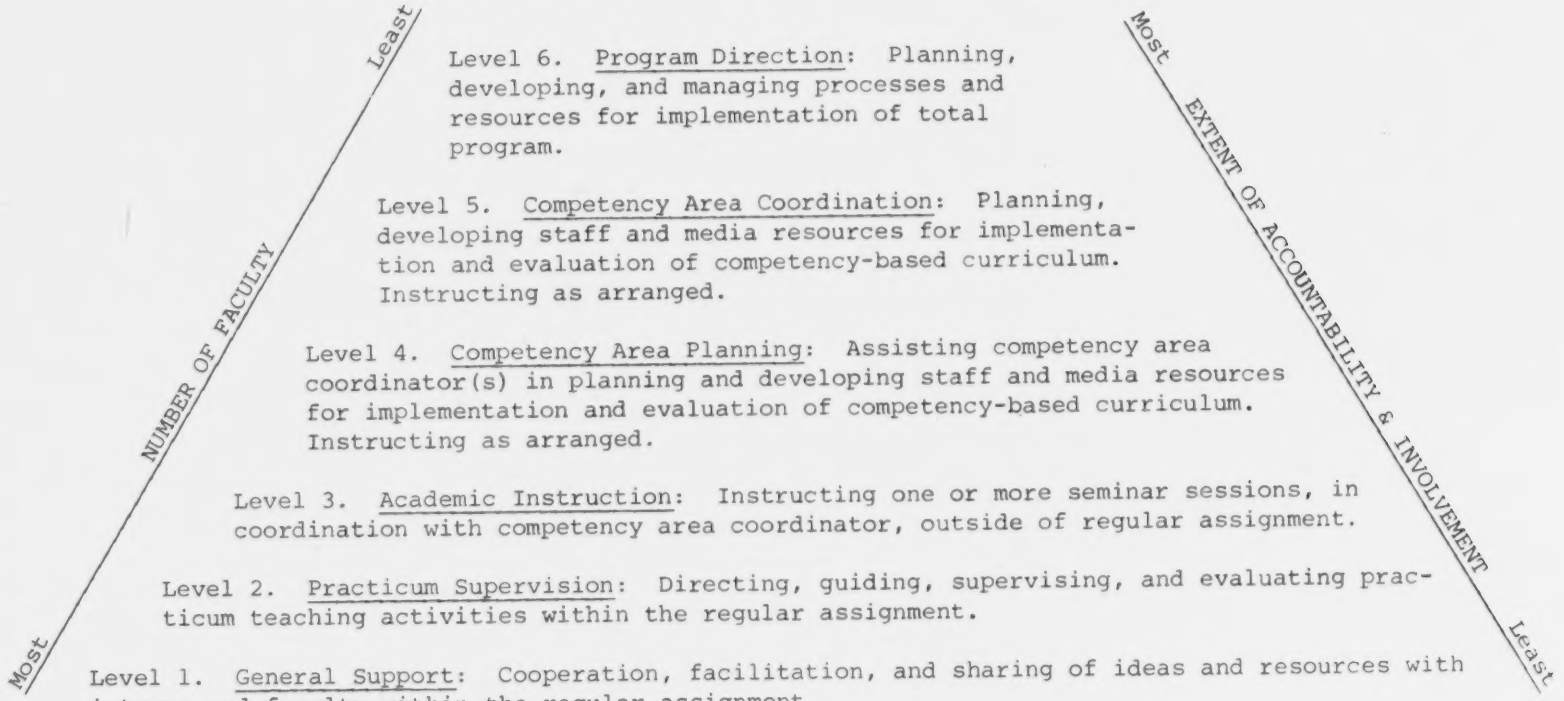
Applicants who pass Phase I are asked back for Phase II, which consists of intensive individual interviews by members of the Selection Committee. Final decisions are made by the Supervisor of Mark Twain School-Based Programs, the MCPS Program Specialist for Mark Twain School-Based Programs, the School Staff Development Specialist, the School Principal, a representative from the MCPS Staff Development Department, and the Program Director. In the future, observation of applicants' classroom performance will also be part of the selection process.

STAFF

At present, the entire staff of Mark Twain School Programs numbers 79 professionals, 47 of which serve as faculty for the Internship Program. The program delineates six levels of staff responsibility which are shown in the accompanying figure 2. Such a continuum of responsibility is considered extremely important for a teacher training program in a school-based setting, where the regular demands of dealing with emotionally handicapped children are already quite extensive. The assignment of responsibilities in various levels is primarily voluntary: staff are given the opportunity to volunteer for whichever level they feel most competent and have the most interest in. In this way, no staff member need feel that his participation in teacher training activities is an unwarranted drain on the energies he must devote to dealing with children in the school.

Level 1, general support, is the minimum expectation for faculty, and all staff are involved in this area. Mark Twain administrators state that general support of--if not actual participation in--teacher training activities must be an important consideration in recruitment of staff for a school such as Mark Twain. Level 2, practicum supervision, is a voluntary unpaid position for staff members, and activities related to this level are considered to be part of the faculty person's regular responsibilities at the school. Level 3 is academic instruction (seminar), Level 4 is Competency Area Planning, and Level 5 is Competency Area Coordination. All staff at Levels 3 through 5 (except the Program Director and the

FIGURE 2. MODEL FOR LEVELS OF STAFF RESPONSIBILITY IN MARK TWAIN TEACHER EDUCATION PROGRAM



Level 6. Program Direction: Planning, developing, and managing processes and resources for implementation of total program.

Level 5. Competency Area Coordination: Planning, developing staff and media resources for implementation and evaluation of competency-based curriculum. Instructing as arranged.

Level 4. Competency Area Planning: Assisting competency area coordinator(s) in planning and developing staff and media resources for implementation and evaluation of competency-based curriculum. Instructing as arranged.

Level 3. Academic Instruction: Instructing one or more seminar sessions, in coordination with competency area coordinator, outside of regular assignment.

Level 2. Practicum Supervision: Directing, guiding, supervising, and evaluating practicum teaching activities within the regular assignment.

Level 1. General Support: Cooperation, facilitation, and sharing of ideas and resources with interns and faculty within the regular assignment.

Staff Development Specialist) receive additional pay as in-service consultants; the amount they receive depends on the amount of time they spend apart from their regular school duties. Any faculty member can express interest in participating at Levels 3 and 4. Based on availability, commitment to training, and expertise in the relevant competency area, the administration decides whether the person can fulfill the instructional requirements of that level. Staff selection for Level 5 is given careful consideration by the Project Director, since this group is the primary planning and decision-making body for the training program, and their activities require a high degree of involvement and commitment to the program. Level 6 is program direction itself.

Each of the five competency areas (psychoeducational assessment and programming; human relations and counseling; curriculum development and implementation; behavior management; and systems analysis and consultation) is coordinated by one or more members of the Level 5 group, who are responsible for developing and arranging the implementation of learning experiences in their competency areas, in consultation with their counterparts at Level 4 and the program directors. The Mark Twain staff exercise this function in every case because they feel the program's goals and objectives can best be achieved when there is local responsibility and direction. The role of staff at Level 5 is intended to assure responsiveness to the needs and reactions of the interns. Of course, staff at Levels 2 and 3 also assume a major share of the actual instruction and supervision of trainees.

In addition to the regular paid staff of the Internship Program, outside consultants are brought in for instruction or planning relevant to the competency areas. A broad range of Montgomery County Public School resource staff has been involved in the program this way. Sources of support from outside MCPS may also be brought in from time to time to assume a key role in the instruction or management of a seminar, or to provide a relatively brief contribution in the form of a single lecture, a short series of lectures, or consultation on a particular topic.

COMMUNITY

During the planning phase for the Mark Twain School, residents of Montgomery County were involved in a number of committees which helped plan the school's facility, operations, staff selection and development. These people were local

teachers, psychologists, counselors, representatives of various agencies, and private citizens. A Community Advisory Committee was organized, as well as a Staff Development Advisory Committee, which made recommendations on goals for the teacher training and staff development activities at the school and on the content of training to be offered. As actual operations of the school have been implemented, the roles of these committees have diminished, and there is currently no formal linkage between the general community and the Mark Twain School.

However, formal linkage with the County is maintained through the Mark Twain School-Based Programs in 12 Montgomery County junior and senior high schools. Moreover, regular meetings are held with the parents of the 200 children currently enrolled at Mark Twain. A Communications Assistant trained by the Internship Program and employed at the school helps maintain outside contacts by arranging tours for visitors (400 people have visited the school), answering questions posed by telephone callers, and disseminating information to PTAs and other private and social service organizations.

PART FIVE:

PROGRAM EVALUATION

EVALUATION DESIGN

Since the Mark Twain Internship Program has only been operational since late August of 1972, a full-scale evaluation of the program's effectiveness has not been possible. However, the evaluation design has been formulated, and the data needed to complete the evaluation have been identified, along with the tasks required to produce such data.

The program's general procedure for evaluation consists of four distinct phases: definition, planning, data management, and documentation. During the definition phase, a set of statements about the project and its evaluation must be made to form a clear basis for communication and action. The planning stage determines activities necessary to meet evaluation objectives, delineates tasks, and established procedures. It also documents the plan and obtains concurrence from program staff. Data management includes selection of data collection techniques and instruments, specifications of statistical tests and significance levels, collection and analysis of data, and a summary of interim findings. The documentation phase results in the final report for the project. To date the definition and planning phases have been completed, and activities in the data management phase are well underway.

During the definition phase, the purposes and goals of the Internship Program were identified and reviewed to develop clear statements of the scope of the evaluation. Six objectives were defined, and during the planning phase, evidence acceptable to the program staff, as well as the activities and tasks required to obtain this evidence, were identified for each of the objectives. They are:

Objective	Evidence
To assess faculty qualifications to determine if they are sufficient for performing required functions and duties.	Evaluation by judgment will be obtained from experts. In addition, program participants will rate faculty effectiveness.
To assess the effectiveness and feasibility of the recruitment and selection process and procedures.	Operation of training program with at least 10 full-time interns and evaulation by judgment of experts.

Objective	Evidence
To assess the adequacy of the multi-competency teacher education curriculum for its comprehensiveness and internal consistency.	Evaluation by judgment will be obtained from three sources: program staff, program participants, and experts in the field.
To assess each participant completing the training program for his competency in each of the five basic areas.	Individual participant attainment of competencies and group shifts in attitudes and values.
To assess competency assessment techniques for validity, reliability, examinee appropriateness and administrative feasibility.	Development of competency measures of knowledge, attitudes, and skills within each teacher competency area.
To determine if personnel completing the training program are effectively serving emotionally handicapped children and are utilizing learned competencies.	Program graduates' statement of utility of learned competencies for their job placement and supervisory ratings of job effectiveness.

EVALUATION ACTIVITIES

The Supervisor of Research and Evaluation is assigned to the Mark Twain School by the Montgomery County Public School System. He does not report to the School Principal, but rather to the Associate Superintendent for Administration in the county school system, and as a result acts as a free agent in the school. One of his current evaluation activities is working with Competency Area Coordinators to help them develop assessment techniques for each of the 18 sub-competencies. (Assessment techniques developed by Level 5 staff will eventually be compared with those developed independently by the Supervisor and revised if necessary.) In addition, the Supervisor is serving as consultant to the Competency Area Coordinators, who are primarily responsible for the transformation of performance objectives into behavioral objectives. The evaluation design specifically calls for the development of a number of pre- and post-training program techniques to measure the attainment of competencies among individual interns (which, in some cases, will also be used to allow interns to "validate out" of training in certain areas). This activity has been somewhat retarded by the fact that the program's curriculum has not yet been fully developed, so precise pre-tests for each sub-competency have been impossible to devise.

The Supervisor of Research and Evaluation has also developed and administered a battery of pre- and post-training instruments to measure group shifts in attitudes and values among participants. The instruments were administered to participants

in the original Mark Twain Staff Development Institute, as well as to this year's interns. A total of eight questionnaires and inventories make up the battery, including the Minnesota Teacher Aptitude Inventory, a Teaching and Learning Preference Questionnaire, and a Personal Orientation Inventory.

It is interesting to note that the evaluation activities for the Mark Twain Program are themselves subject to an outside evaluation. The Supervisor has contracted with the Evaluation Research Center at the University of Virginia to do an independent audit of the program which will assess the appropriateness of evaluation procedures for determining program effectiveness and verify the accuracy of the results of that evaluation. The Supervisor receives continual feedback on evaluation activities from the Research Center, as well as a review of his annual reports to the Office of Education.

PART SIX:

RECOMMENDATIONS AND FURTHER INFORMATION

RECOMMENDATIONS FOR REPLICATION

A number of factors are necessary for the successful development and operation of a performance-based teacher training program such as Mark Twain's, which operates in conjunction with a local education agency (in this case, the Montgomery County Public School System). These factors include the following:

- Inclusion of a practicum component in the training program

  By definition, a course of instruction based on performance cannot function without arrangements for some sort of practical experience for the students. Moreover, staff of the Institute feel that a purely theoretically-based program of instruction would not be satisfying to committed teachers such as the Mark Twain trainees, who have already been involved for two or more years in the "real world" of teaching.

- Strong support from the local education agency and the community

  For an innovative and costly program like Mark Twain's, full support of the city or county school board is essential. The personnel and monetary resources which have been required for the planning and implementation of the Mark Twain teacher-development programs have been extensive, and staff are thoroughly aware of the fact that, without the strong support of the county School Board and administration, the project could have been halted at any stage of its development. This support was engendered and has been continued through careful planning on the part of the Internship staff. A highly detailed outline of the expected costs of the project was drawn up during the early planning stages of the project so the School Board would be aware of exactly what resources it would be required to provide. Moreover, the staff has been careful to keep the Board and administration continually aware of developments in the project, and has taken pains to have clear facts available whenever questions were raised. Community support was assured early in the planning phase by the establishment of a Citizen's Advisory Committee made up of influential and credible residents of Montgomery County. The ready availability of staff and the establishment of the position of Communications Assistant to inform the public about Mark Twain operations have helped to maintain this support.

- Sufficient time and resources for curriculum development

  One of the problems the program has faced is that staff did not have sufficient time to develop the entire training curriculum

before initiation of courses. As a result, the staff have been forced to create materials as they go. This has led to a number of difficulties. For example, it was hoped that pre-tests could be administered when trainees entered the program, allowing them the possibility of "validating out" of certain courses; however, the absence of a fully-developed curriculum and assessment criteria in various competency areas has made this infeasible. Furthermore, the fact that pre-tests could not be administered in certain areas has made the task of evaluating trainee progress quite difficult.

- Financial support for trainees

  The Montgomery County Public School system provides its already-employed teacher-interns with from 50 to 60% of their regular annual salaries during their participation in the program. Staff feel this is an important feature of their set-up. Arrangements for at least partial reimbursement to students should be established well in advance of recruitment, so teachers will be encouraged to apply knowing they will not lose a year's salary.

- Instructional Pool

  A pool of instructors with various degrees of responsibility in the program is important to a school-based operation such as Mark Twain's. Obviously, one of the prime considerations for people both inside and outside the school is the quality of service to youngsters with special needs. Since the teacher training program might seem to threaten to draw resources away from this direct service, it is essential that each member of the teacher-training staff receive adequate support from other staff members. It is equally important that staff be allowed to volunteer for each level of responsibility so that no one feels his energies are being drained against his will, or that his teacher-training duties are competing with his commitment to quality service for the school's children.

FOR FURTHER INFORMATION

For further information about the Mark Twain Teacher Internship Program, contact:

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MATERIALS AVAILABLE

The following materials are available upon request from the Mark Twain Teacher Internship Program without charge:

1. The Mark Twain Teacher Internship Program (brochure)
2. An Overview of rhe Mark Twain Teacher Internship Program (26 pp., mimeo).
3. A Summary of Competency, Sub-Competency, and Performance Objectives for the Mark Twain Teacher Internship Program (7 p., mimeo).
4. Current List of Available Materials.